

WHAT IS CLAIMED IS:

1. An interface unit capable of being connected to a main unit of a key telephone system, the main unit connecting a telephone terminal to a telephone network, the interface unit being adapted to be communicated with the telephone terminal at one of plural transmission speeds, the interface unit comprising:

10 a first transmitter configured to transmit a type query signal to the telephone terminal at a first speed;

a first receiver configured to receive a type signal from the telephone terminal at the first speed; and

15 a second transmitter configured to transmit a speed change request to the telephone terminal and change a transmission speed to a second speed if the received type signal indicating that the telephone terminal is capable of transmitting data at the second speed.

2. The interface unit according to claim 1, wherein said second speed is faster than the first speed.

25 3. The interface unit according to claim 1, wherein said plural transmission speeds includes at least two speeds.

4. The interface unit according to claim 1,

5. A key telephone system comprising a telephone terminal and a main unit which connects the telephone terminal to a telephone network, and includes a telephone interface unit connected to the telephone terminal, a network interface unit connected to a telephone network, and a connection line connecting the telephone interface unit and the network interface unit, wherein

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        a first transmitter configured to transmit a
        type query signal to the telephone terminal at a first
15    speed;

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20           a second transmitter configured to transmit  
a speed change request to the telephone terminal and  
change a transmission speed to a second speed if the  
received type signal indicating that the telephone  
terminal is capable of transmitting data at the second  
speed, and

a first transmitter configured to transmit the type signal to the interface unit at the first

a first receiver configured to receive the speed change request transmitted from said second transmitter and to change a transmission speed to the second speed in response to the received speed change request.

7. The system according to claim 5, wherein said  
10 plural transmission speeds includes at least two  
speeds.

8. The interface unit according to claim 5,  
wherein said second transmitter transmits the speed  
change request to the telephone terminal at the first  
speed.

9. A transmission speed control method for a key telephone system comprising a telephone terminal and a main unit which connects the telephone terminal to a telephone network, the method comprising:

20           causing the interface unit to transmit a type  
query signal to the telephone terminal at a first  
speed;

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        causing the telephone terminal to transmit a type
        signal to the interface unit at the first speed in
25     response to the type query signal;

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causing the interface unit to receive the type  
signal from the telephone terminal at the first speed;

causing the interface unit to transmit a speed  
change request to the telephone terminal and change  
a transmission speed to a second speed if the received  
type signal indicates that the telephone terminal is  
5 capable of transmitting data at the second speed; and

causing the telephone terminal to change a  
transmission speed to the second speed in response to  
the speed change request.

10. An interface unit for a telephone system  
10 comprising a telephone terminal and a main unit which  
connects the telephone terminal to a telephone network  
and includes the interface unit capable of being  
connected to the telephone terminal, the telephone  
terminal being capable of operating at one of a first  
15 speed and a second speed which is faster than the first  
speed, the interface unit comprising:

a transmitter configured to transmit data to the  
telephone terminal at one of the first speed and the  
second speed;

20 a receiver configured to receive data from the  
telephone terminal at one of the first speed and the  
second speed;

a detector configured to detect whether or not the  
telephone terminal is capable of transmit and receive  
25 data at the second speed; and

a mode setting device configured to set an  
operation speed of said transmitter and said receiver

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to an optimum speed based on the detection result of said detector.

11. The interface unit according to claim 10, further comprising:

5           a mode change requesting device configured to cause the telephone terminal set an operation speed to the optimum speed based on the detection result of said detector.

10           12. A main unit connecting a telephone terminal to a telephone network, comprising:

          a transmitter configured to transmit data to the telephone terminal at one of the first speed and the second speed;

15           a receiver configured to receive data from the telephone terminal at one of the first speed and the second speed;

          a detector configured to detect whether or not the telephone terminal is capable of transmit and receive data at the second speed; and

20           a mode setting device configured to set an operation speed of said transmitter and said receiver to an optimum speed based on the detection result of said detector.

25           13. The main unit according to claim 12, further comprising:

          a mode change requesting device configured to cause the telephone terminal set an operation speed to

the optimum speed based on the detection result of said detector.

14. A telephone terminal used for a key telephone system comprising a main unit which connects the  
5 telephone terminal to a telephone network, the telephone terminal comprising:

a transmitter configured to transmit a type signal to the main unit at a first speed in response to a type query signal transmitted from the main unit at the  
10 first speed; and

a mode setting device configured to change a transmission speed to the second speed in response to a speed change request transmitted from the main unit.

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